

2010 NACOL Virtual School Symposium

Pre-Conference Session Evaluation and Research in Online Learning

1:00pm Overview and introductions (Tom Clark/Susan Lowes)

- Why do online learning programs need evaluation and research?
- Definitions and plan for the afternoon
- Introductions

1:20pm Presentation 1: Identifying what we want to know

- Identifying evaluation needs and questions (Cheryl Charlton & Liz Pape)

Small groups: What do we want to know?

Handout: A basic logic model for setting up an evaluation (Susan Lowes & Tom Clark)

2:20pm Break

2:30pm Presentation 2: Defining and measuring outcomes

- Defining measurable outcomes (Tom Clark)
- Selecting evaluation methods and formulating evaluation questions (Susan Lowes)

Small groups: Measuring your success

Handout: Outcomes-based quality measures (Liz Pape)

3:30pm Break

3:40pm Presentation 3: Integrating research and evaluation

- How to work with academic researchers (Leanna Archambault)
- Combining research with evaluation (Rick Ferdig)

Small groups:

Finding and working with an evaluator

Sharing evaluation and research findings with stakeholders

How to evaluate specific outcomes

Other topics identified by participants

Handout: Working with academic researchers: do's and don'ts (Rick Ferdig)

Handout: Setting up an evaluation: Do's and don'ts (Tom Clark)

4:40 Open-ended Discussion and wrap-up

LOGIC MODEL

Goal	Specific objectives (needs)	Activities and services provided to meet objectives	Questions to be addressed to decide if the program met the objective
[example] To improve online student success in gateway courses	To increase understanding of Algebra concepts of students enrolled in Algebra I in a state virtual school	Identify Algebra concepts that students have difficulty mastering; develop interactive tools designed to assist with understanding; develop and align parallel course units that do or do not include these tools	Does the use of embedded interactive tools increase the understanding of Algebra I concepts of students enrolled in an online course?
[example] To improve district graduation rates	To increase graduation rates of district students enrolled in an online alternative program through local schools	Develop an evidence-based student support model, and provide training and ongoing support for local school lab facilitators; provide netbooks, lab access, and ongoing online support for enrolled students.	Can the district improve graduation rates of alternative students by implementing new student support structures at the local school level? Does fidelity of implementation of the local support model impact student success?

DEL TEMPLATE

Desired Indicators of success: Outcomes (changes in individuals or organizations)	Desired Indicators of success: Outcome Indicators (measures of outcome attainment)	Measures & instruments	Baseline data needed
Students show increased understanding of Algebra concepts (a change in knowledge/skills)	Students using interactive tools have significantly higher gains on a pre-post test of Algebraic understanding than students who do not use these tools.	Course review; State Algebra I end-of-course test; standardized Algebra test, student surveys, observation	Disaggregated student records; prior scores on state math assessments, pre-test scores on national Algebra test
Students are more likely to graduate, including those in underserved subgroups. (a change in status)	Graduation rates of alternative program students increase 10 percent compared to the prior year.	Lab facilitator and student surveys and focus group; observation; records of online activity	Disaggregated student records; alternative school course and graduation records

Virtual High School Global Consortium

Quality Program Description

The mission of Virtual High School is to develop and deliver standards-based, student-centered online courses to expand students' educational opportunities and 21st century skills and to offer professional development to teachers to expand the scope and depth of their instructional skills.

Background: Virtual High School (www.goVHS.org) started in 1996 with a Technology Innovation Challenge Grant from the US Department of Education. The purpose of the grant effort was to create a national collaborative of schools offering online courses. VHS is an educational non-profit that focuses on the development and delivery of advanced, elective, technical and interdisciplinary courses that complement a school's core offerings. Some of the courses VHS offers include Advanced Placement Statistics, Career Awareness for the New Millennium, Web Design: Artistry and Functionality, and Pre-AP-level English Language and Composition (<http://www.govhs.org/Pages/Academics-Catalog>). All VHS courses are taught by certified teachers from schools participating in the VHS collaborative. VHS courses and teachers meet VHS's design and delivery standards and are reviewed against those standards on a periodic basis.

VHS's Quality Program

Program Evaluation: VHS annually evaluates its performance by measuring growth and quality, using both hard data and survey input from member school superintendents, principals, teachers, site coordinators and students. Results are published in the annual evaluation reports (<http://www.govhs.org/Pages/WhyVHS-Home> Results) which are conducted by an independent evaluation team. VHS has developed a Quality Benchmark Indicators program to measure the quality of its courses, professional development and program services. The data to determine the Quality Benchmark Indicators is collected as part of the annual program evaluation. VHS staff uses growth and quality data to determine annual goals, as well as to develop and revise the VHS five-year strategic plan.

Growth Indicators: VHS annually sets and measures growth goals. Growth is measured by the number of schools, students and courses in VHS.

Quality Indicators: The VHS mission statement, "to develop and deliver standards-based, student-centered online courses to expand students' educational opportunities and 21st century skills and to offer professional development to teachers to expand the scope and depth of their instructional skills" focuses VHS's efforts on two primary areas: development and delivery of online courses, and preparation of classroom teachers to be effective online teachers. A third area of focus is to create a membership model of program services that enables VHS to be a self-sustaining non-profit organization.

Quality of Courses

Rigor and quality of VHS courses are measured by AP exam pass rates, percentage of AP students taking the AP exam, course completion rates, and percentage of students taking courses for credit recovery who recover credit. During 2008/2009:

- 62% of the VHS AP students who took the AP exam passed with a score of 3 or higher. The VHS cumulative AP exam pass rate, from 2000/2001 to 2008/2009 is 62.3%;
- 80% of VHS AP students took the AP exam;
- 80% of all VHS students successfully completed their VHS course with a grade of 60 or higher;
- 68% of students who took summer courses to recover course credits successfully completed their courses;
- Survey data indicates high levels of satisfaction with development of 21st century skills, student collaboration and student engagement in VHS course content.

Quality of Professional Development

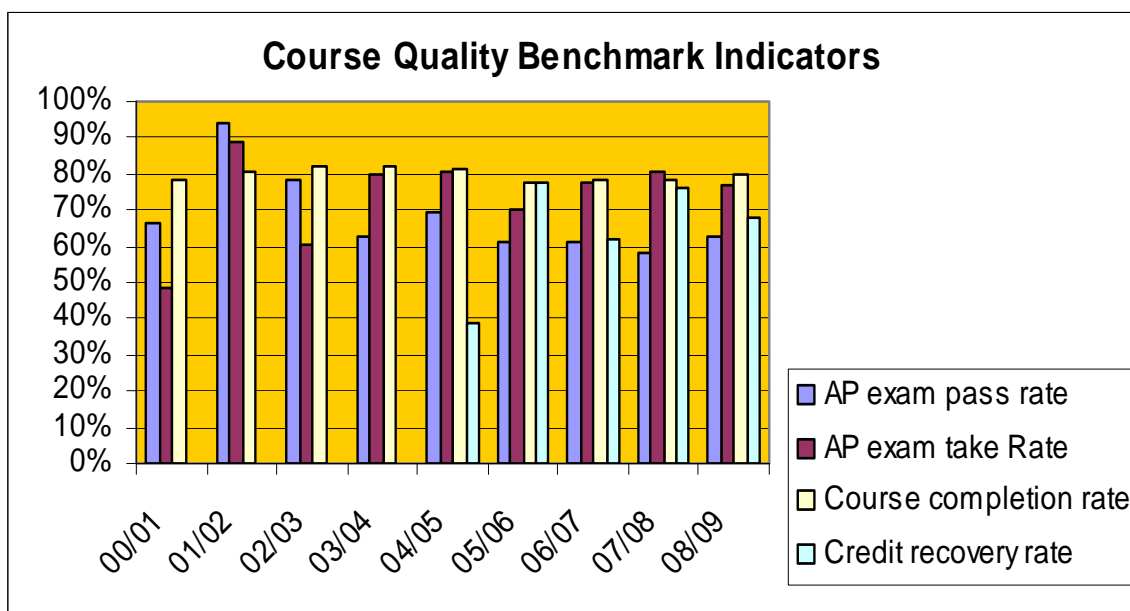
Indicators of the quality and rigor of VHS's teacher professional development program are the percentage of teachers who successfully complete the online professional development course as evidenced by demonstration of online teaching skills mastery, and the percentage of teachers able to successfully navigate their first semester of teaching online, meeting all VHS's standards for online course delivery. In 2008-2009:

- 93% of VHS teachers successfully completed VHS training; and
- 91% of VHS's first-year teachers demonstrated the successful habits of practice of effective online teachers.

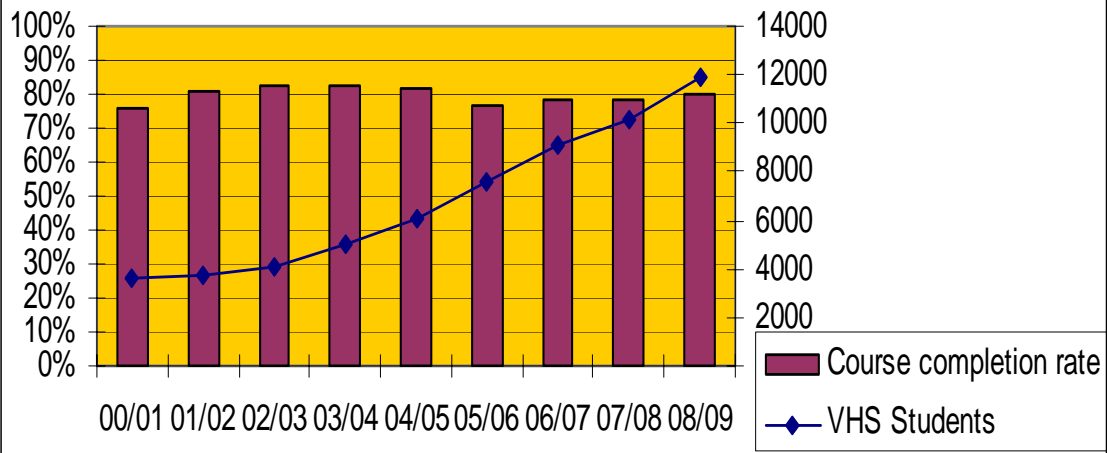
Quality of Services and Program

Indicators of the quality of VHS services and program are membership retention rates and school seat enrollment utilization rates. The membership retention rate is defined as the percentage of schools which renew membership from one school year to another. Seat utilization rates are based upon the number of student seats a school uses as a percentage of the total number to which the school is entitled as part of its membership contract with VHS. In 2008-2009:

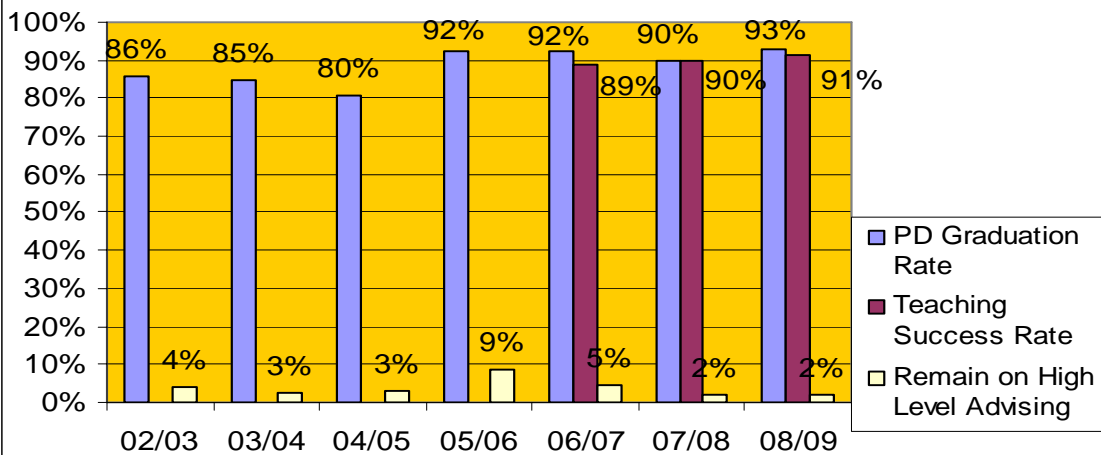
- 91% of member schools renewed their membership; and
- member schools utilized 68% of the student enrollment seats they were entitled to, and, overall, 78% of available VHS student seats were utilized.



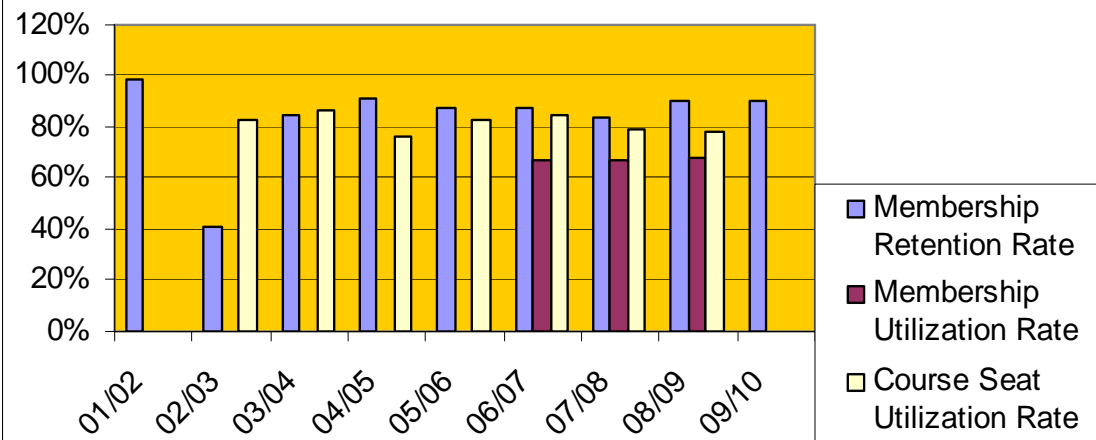
Course Completion Rate over Enrollments



PD Quality Benchmark Indicators



Program Services Quality Benchmark Indicators



Recommendations for Working with Academic Researchers

Rick Ferdig; Kent State University's Research Center for Educational Technology
rferdig@gmail.com; <http://www.ferdig.com>

1. Understand the role of Human Subjects (IRB)

(f) Human subject means a living individual about whom an investigator (whether professional or student) conducting research obtains

- (1) Data through intervention or interaction with the individual, or
- (2) Identifiable private information.

<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm>

2. Understand the complexity of data, data collection, and data use

- Teacher
- Student
- Course
- Course Instance
- Entity
- School/Other

<http://www.vsclearinghouse.com/>

3. Be prepared to discuss your goals

What is it that you want to get out of the relationship? It's not just poking and prodding.

4. Understand the difference between research and evaluation

5. Consider the currency of each domain (e.g. Journals, grants, legislative inquiries, etc.)

6. Understand how to talk to multiple audiences (e.g. policy reports, publications, etc.)

7. Help bridge Grants, Foundations, and Business

- NSF
- MacArthur/Gates
- Local community/Business

SETTING UP AN EVALUATION: DO'S AND DON'TS

Tom Clark, PhD, TA Consulting

Should I use an external or an internal evaluator?

External funders often require evaluation of a program by an outside party – an external evaluator -- to ensure its objectivity. However, many evaluations are elective in nature – an organization decides to carry out an evaluation for the purpose of maximizing program success or to be ready for accountability requirements down the road. The organization is free to determine what kind of evaluation assistance is needed.

Most organizations already carry out internal evaluation activities. Routine data gathering and analysis for performance reporting and data-driven decision making purposes are typically internal evaluation functions. For this kind of information need, it can pay dividends long-term to develop internal staff capacity, even if outside assistance is called upon temporarily.

Organizations often call upon outside consultants in areas where they lack expertise, or to validate their own efforts. Studies of educational programs of a descriptive, evidence-based or causal nature, carried out on an occasional basis, are typically an external evaluation function.

Internal performance reporting and external evaluation are complementary in nature and together can provide a full range of information for program managers.

External evaluation can:

- Validate performance data and refine performance indicators
- Provide information beyond performance measures
- Address strategic, not programmatic, goals
- Guide program improvement
- Provide third party validation of the program
- Explore hypotheses and provide context beyond the experience of individual programs*

Where do I find external evaluators?

There are many ways to find external evaluators. Evaluators can be found through lists, such as those maintained by U. S. Department of Education (www.ies.ed.gov) or the American Evaluation Association (www.eval.org).

Collegial networking with administrators of similar program or projects that have had external evaluations can also be valuable. These colleagues may be willing to provide referrals to evaluators who conducted evaluations of value to their organizations.

If the evaluation is of a certain size, a request for proposal and bidding process may be required under law for your kind of organization. Here your network may suggest evaluators who should be included in the RFP dissemination list. A qualified evaluator will typically have a masters degree or higher in a field related to the program, be able to document skills related to conducting the study of interest, and to provide references from prior evaluation projects.

* U. S. Department of Education (1999). *ED Performance Reporting and Evaluation Under GPRA*.